MANAGEMENT OF OPIOID USE DISORDER: Medication Assisted Treatment

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- I hereby declare that the content for this activity, including any presentation on therapeutic options, is well balanced, unbiased, and to the extend evidenced based.
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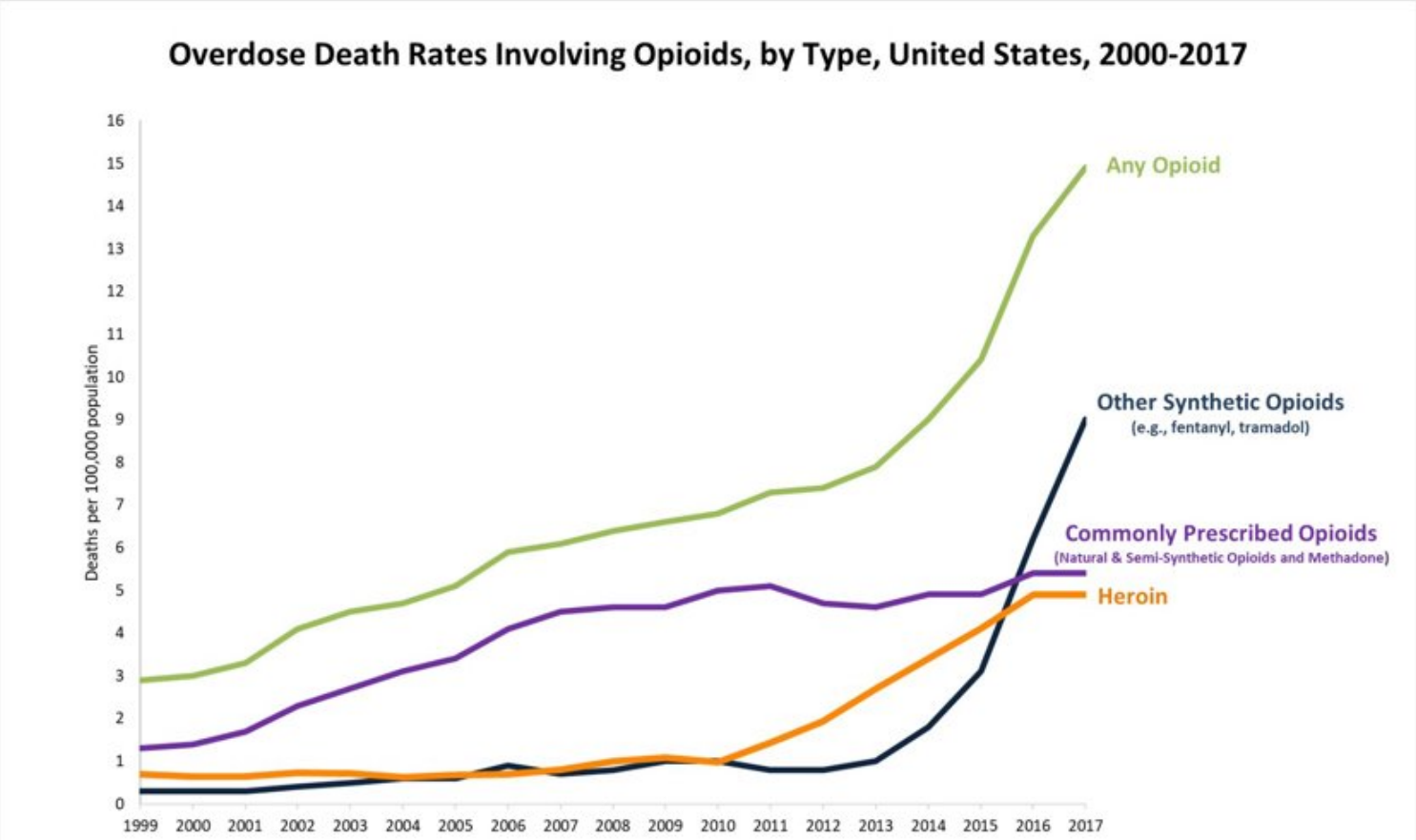
Current Toll and Trends

- Overdose in 2017
  - 70,237 drug overdose
  - 59% involved synthetic opioids
  - Arizona with largest relative rate increase in synthetic opioid overdose (122%)
    - 1.8/100,000 deaths (2016)
    - 4/100,000 deaths (2017)
- Substances cut with fentanyl:
  - Street oxycodone, street benzodiazepines, heroin, cocaine, methamphetamine



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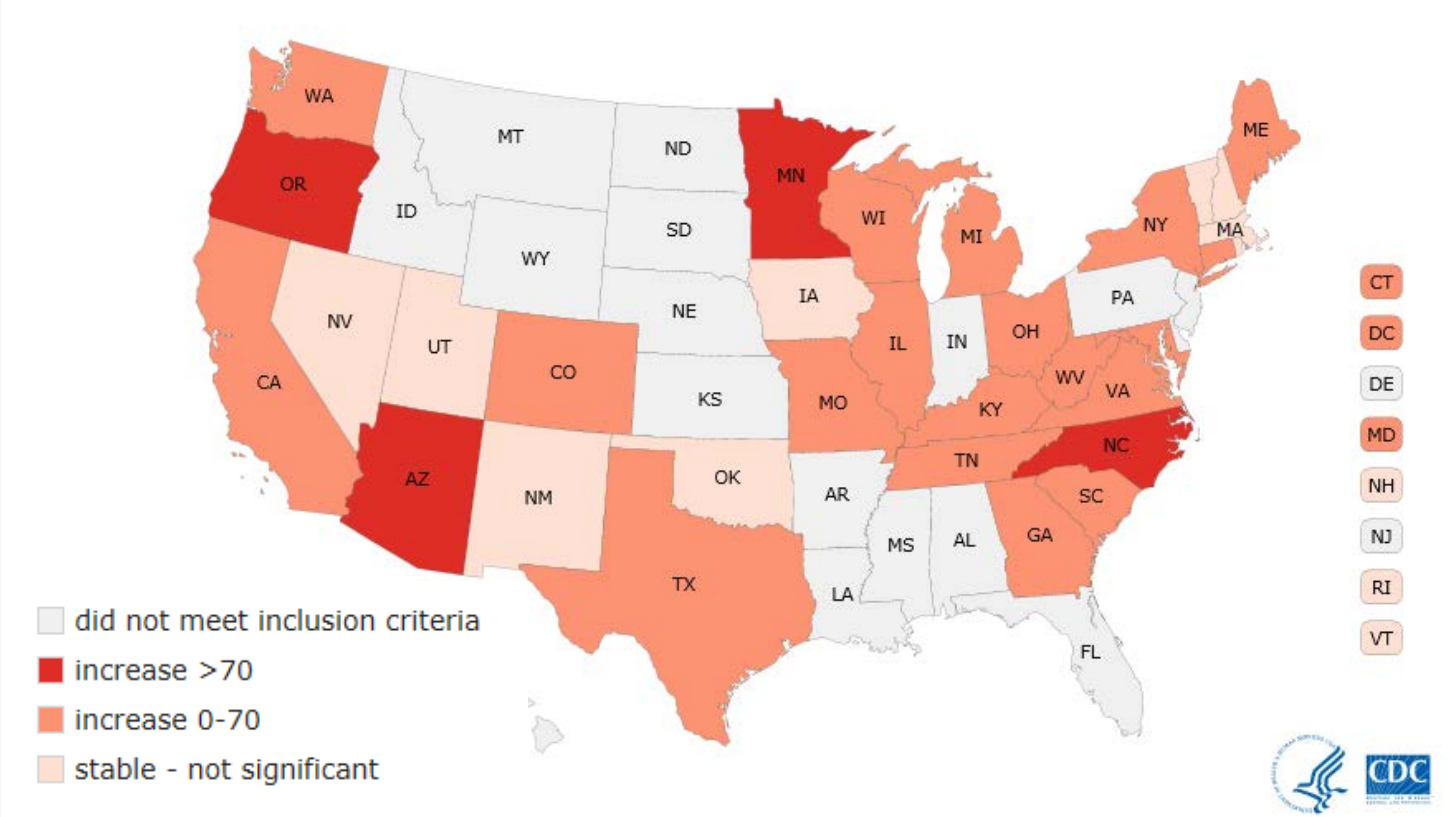


Objectives

1. Describe medication assisted treatment (MAT)

Addiction • Sociopsychobiologic

2. Discuss MAT efficacy, length of treatment, pregnancy, and common perceptions

3. Discuss access to MAT including telemedicine

DSM-V Criteria – Opioid Use Disorder and the 3C's

Loss of Control	Using larger amounts over a longer period than initially intended
	Persistent desire or inability to cut down or control opioid use
	Spending a lot of time to obtain, use, or recover from use
Craving	Cravings or strong desire to use
Use Despite Consequences	Failure to fulfill obligations at work, school, or home due to use
	Continued use despite persistent or recurrent social or interpersonal problems related
	Activities are given up or reduced because of use
	Recurrent use in situations that are physically hazardous
	Continue use despite physical or psychological problems related to opioids
Physiologic Dependence	Tolerance*
	Withdrawal*

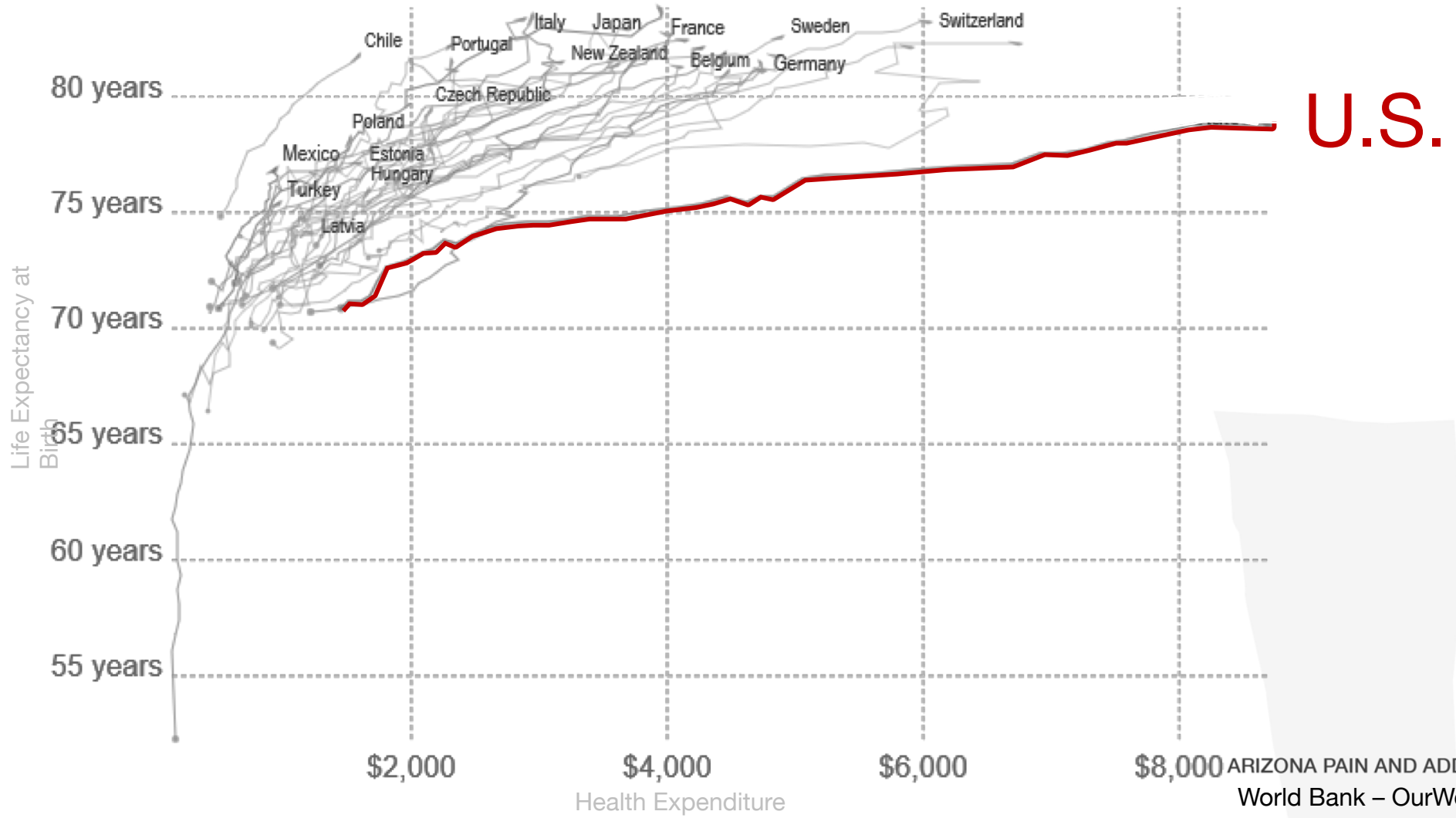
Mild 2-3, Moderate 4-5, Severe ≥6
***Does not count toward Use Disorder if prescribed and taken as directed**

Why do we care about models?

- What causes [blank]?
- What are the treatment and goals?
- Who is responsible for treatment outcomes?
- How does the health system drive care?

BIOMEDICAL

The U.S. pays most per capita for health care and ranks one of the lowest: Life expectancy vs. health expenditure, 1970 → 2015.



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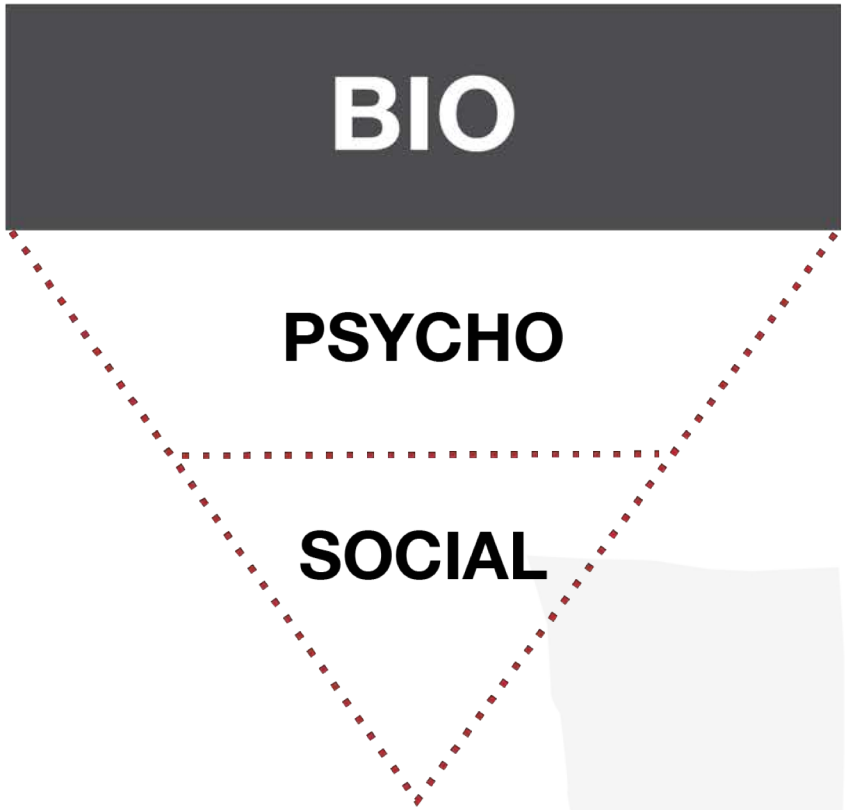

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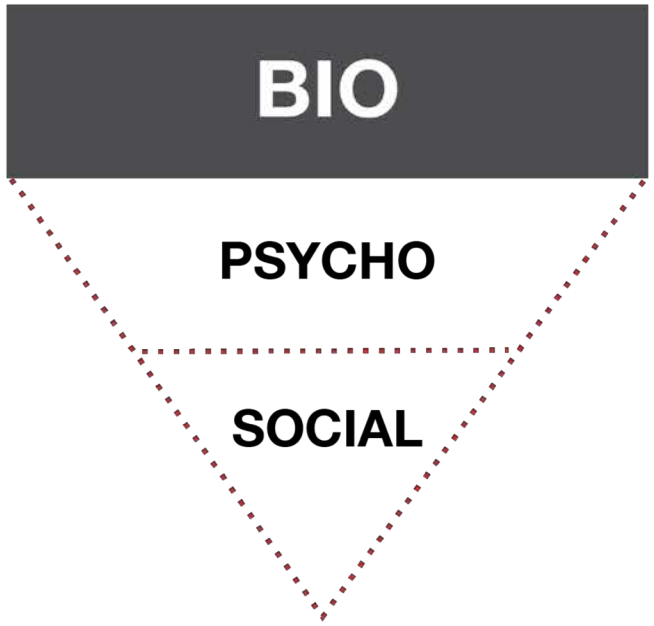



SOCIO
PSYCHO
BIO

Sociopsychobiologic approach to substance use disorder

Food, Water, Shelter/Housing
Financial, Insurance, Transportation
Domestic Violence
Human Trafficking
Family/Peer Support
Prevention
Destigmatizing Campaign
Criminal Justice Reform

Screening and Treat Mental Health Disorder
Counseling and Behavioral Support
Coping Skills / Resilience
Relapse Prevention

MAT: Methadone or Buprenorphine
Depo-naltrexone
Primary Care / Preventative Medicine
Multimodal Pain Mgmt
Harm Reduction

Medication Assisted Treatment

- Goals of treatment:
  - Regain control
  - Decrease opioid withdrawal
  - Decrease cravings
  - Decrease use opioids
  - Block subsequent use of opioids
  - Improve quality of life of individual and community
- Length of treatment
  - Individualized - "As long as is helpful" - no artificial limits
  - SAMHSA – at least 12 months

Medication Assisted Treatment

- FDA Approved Medications
  - Methadone
  - Buprenorphine
    - Suboxone, Subutex, Zubsolv, Probuphine, Sublocade
  - Depo-naltrexone (Vivitrol)

Socioeconomic Impacts of MAT

- Mortality
  - MAT lowers risk of death while in treatment, specifically death from opioid and other drug overdoses, trauma, and suicide
  - Not on MAT leads to:
    - 2.5 times risk of dying from any cause
    - 8 times risk of overdose death
  - In a study of 3789 patients, there were 113 overdose deaths
    - 61 before treatment
    - 24 during treatment
    - 28 after treatment
  - Save 25 lives if you treat 1,000 with methadone over 1 year

Socioeconomic Impacts of MAT

- Treatment impact
  - MAT increases retention in treatment
    - Methadone > buprenorphine
  - MAT decreases drug use and positive UDS

Cochrane Library
Cochrane Database of Systematic Reviews

Socioeconomic Impacts of MAT

- Crime
  - Involvement in crime and the amount of crime committed during periods of addiction is dramatically higher than during periods of non-addiction
  - During MAT, rates of criminal convictions drop to less than half
    - Acquisitive, drug selling, and violent crimes
  - Patients in continuous treatment have the fewest convictions

Socioeconomic Impacts of MAT

- DUI
  - In one study, 78% of those who tested positive for heroin had been arrested previously for drunken or drugged driving
  - During MAT, convictions for DUI were reduced by 40%
  - Total convictions for men decreased by 35%, for women, 60%

Socioeconomic Impacts of MAT

- Economics
  - Both methadone and buprenorphine are more cost-effective than no drug therapy in dependent opioid users
    - Methadone - £12,584 /QALY (£12584 = $16,347)
    - Buprenorphine - £30,048/QALY (£30,048 = $39,034)
  - Annual commercial health care cost for patients on methadone is 50% less than non-methadone
    - Methadone - $7,163
    - Non-methadone substance treatment - $14,157
    - No substance treatment - $18,694

Socioeconomic Impacts of MAT

- HIV Transmission
  - Between 5-10% of all HIV infections are due to injection drug use
  - With MAT, there is a 54% reduction in HIV transmission risk
  - Multifactorial
    - Less unprotected sex
    - Less sexual partners
    - Less injection drug use

Sidebar

- Depo-Naltrexone
  - Given 7-14 days after last opioid
  - Harder to initiate (30% of patients drop out)
  - Mortality rate lower in treatment, not as favorable as methadone or buprenorphine during and after treatment
  - Retention non-inferior to buprenorphine at 3 mo
  - Treatment retention needs more research

Patient Vignette

Medication Assisted Treatment

- Pregnancy
  - American College of Obstetrics and Gynecology
    - MAT is gold standard treatment
    - Neonatal abstinence may occur and is treatable
    - 60% stopped MAT by 6 months postpartum
      - More developmental impact if parent using while child is growing up
    - Goal is long term chronic disease management

Detox or MAT?

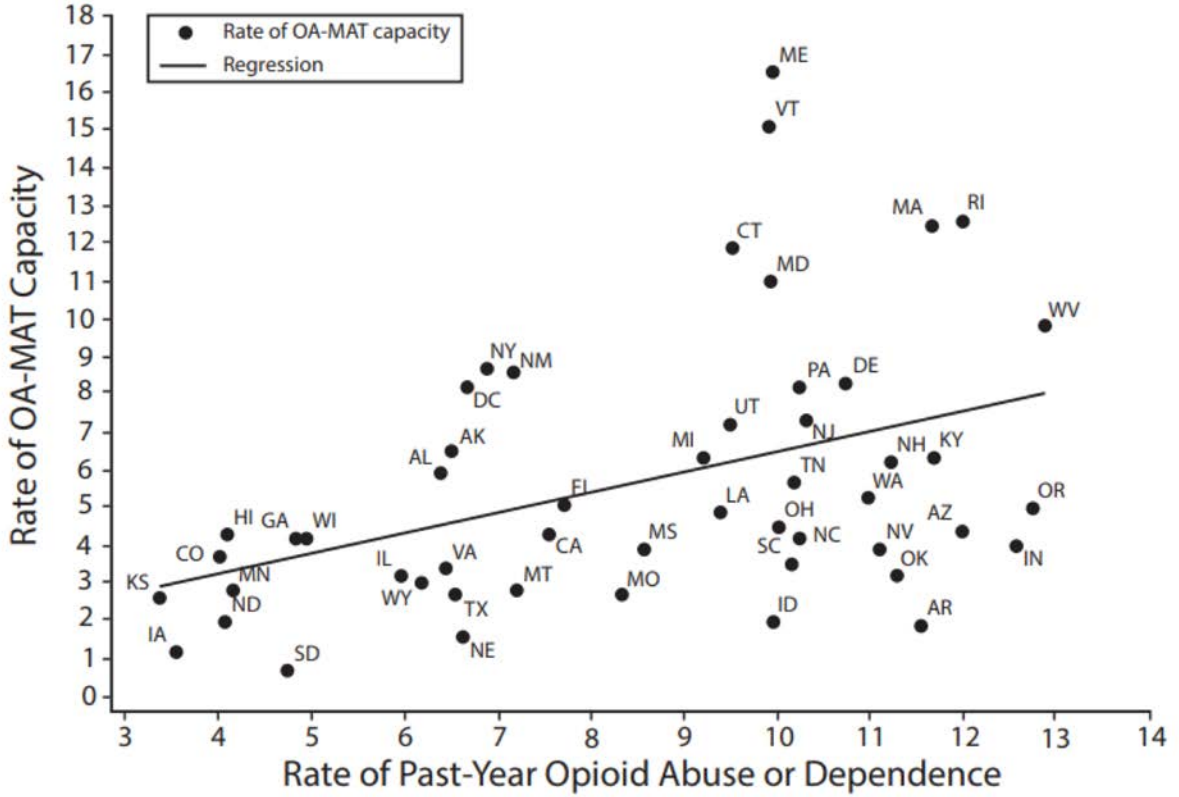
	Detoxification	MAT
Treatment Retention	10-40%	70-95%
Opioid Positive UDS	50-80%	20-50%

- Flexible **high dose methadone** (60-100 mg) or **high dose buprenorphine** (≥16mg) most effective at retention and preventing return to use

- *Can you be in recovery on MAT?*

Access to Medication Assisted Treatment

- Methadone maintenance (1974)
- Drug Abuse Treatment Act (2000)
  - 48% of waivered physicians were prescribing buprenorphine to five patients or fewer
- Lack of MAT access in US
  - OUD rate 891/100,000
    - Methadone capacity 119/100,000
    - Buprenorphine capacity 420/100,000
  - 43% of counties have no DATA physicians
  - 2% of physicians had waiver and 90% were in urban areas
- AZ - 40% of treatment centers offer MAT



Note. OA-MAT = opioid agonist medication-assisted treatment.

FIGURE 2—Comparison of state rates of past-year opioid abuse or dependence and capacity for opioid agonist medication-assisted treatment: United States, 2012.

Rosenblatt et al, 2015
Tesema, et al, 2018

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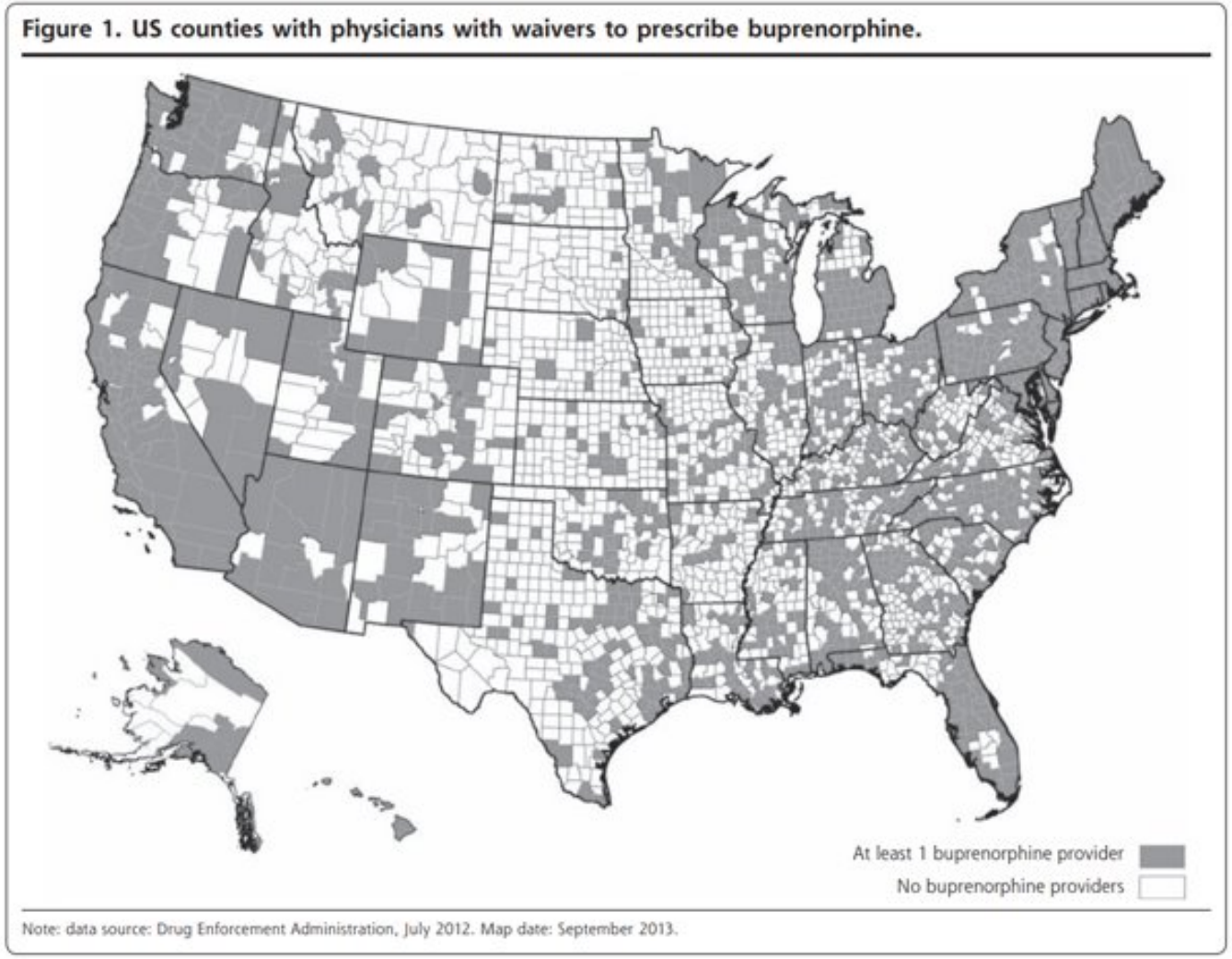

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Access to Medication Assisted Treatment

- MAT in UME/GME/CME
  - ADHS Pain and Addiction
- MAT in Primary Care
  - Sociopsychobiologic support
- MAT in substance use treatment centers
- MAT offered to persons in criminal justice
- Telemedicine
  - More likely to engage in counseling
  - Increased retention in treatment

Objectives

1

Describe MAT

Addiction •
Sociopsychobiologic

2

MAT decreases mortality, drug use, and crime.

MAT in pregnancy!

No duration limits

3

AZ still needs to increase access to MAT

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